### **EXHIBIT** 9





#### **Central Valley Regional Water Quality Control Board**

25 February 2019

Mr. Jason L Meadors, PE Valley Water Management Company 7500 Meany Avenue Bakersfield, CA 93308

**CERTIFIED MAIL** 7018 0040 0000 1911 9966

#### NOTICE OF PUBLIC HEARING CEASE AND DESIST ORDER **FOR** VALLEY WATER MANAGEMENT COMPANY **MCKITTRICK 1 & 1-3 FACILITY** KERN COUNTY

#### TO ALL CONCERNED PERSONS AND AGENCIES:

Enclosed is a Notice of Public Hearing (NOPH) and a tentative Cease and Desist Order (CDO) and Staff Report for the Valley Water Management Company McKittrick 1 and 1-3 Facility. The CDO provides a timeline to achieve compliance with the Basin Plan or cease discharge. A public hearing to consider these matters will be held during the Central Valley Regional Water Quality Control Board meeting which is scheduled for:

Date: 6/7 June 2019

Time: 8:30 a.m.

Place:

California Regional Water Quality Control Board, Central Valley Region

11020 Sun Center Dr #200

Rancho Cordova, CA 85670-6114

Please see the NOPH for additional information about the public hearing.

In order to conserve paper and reduce mailing costs, paper copies of the tentative CDO and Staff Report have been sent only to the Discharger. Others are advised that the tentative CDO, and Staff Report are available on the Central Valley Water Board's web site at:

http://www.waterboards.ca.gov/centralvalley/board decisions/tentative orders/index.shtml

under the heading, "Discharger-Specific Orders for Future Regional Board Meetings." If you have any questions regarding this matter or need paper copies of the CDO or Staff Report

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documents, contact Alejandra Lopez at (559) 445-6071 or by email at Alejandra.Lopez@waterboards.ca.gov.

Please pass this notice on to anyone you think may be interested in this issue.

W. DALE HARVEY Supervising Engineer

Attachments: Native American Tribal Government Consultation Lists Fresno, Kings, Tulare,

and Kern Counties.

Concerned Persons and Agencies List

Enclosures: Notice of Public Hearing

Tentative Cease and Desist Order (Discharger only)

Staff Report (Discharger only)

#### CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD CENTRAL VALLEY REGION

# WATER CODE SECTION 13301 TENTATIVE CEASE AND DESIST ORDER NO. R5-2019-0XXX FOR VALLEY WATER MANAGEMENT COMPANY MCKITTRICK 1 & 1-3 FACILITY KERN COUNTY

The California Regional Water Quality Control Board, Central Valley Region (hereinafter "Central Valley Water Board" or "Board"), finds that:

#### **Facility**

- 1. Valley Water Management Company (hereafter "Valley Water" or "Discharger"), owns and operates two interconnected systems with approximately 163 acres of unlined ponds used for the disposal of oil field produced wastewater by evaporation and percolation. The McKittrick 1 & 1-3 (Facility) is comprised of the McKittrick 1 pond system, which occupies the west side of the Facility and is slightly higher in elevation than the McKittrick 1-3 pond system, which occupies the east side of the Facility. The Facility sits at an elevation of approximately 500 feet (ft) above mean sea level (AMSL) on a 598-acre parcel (Assessor Parcel No. 099-290-19-00-1). The Facility and its monitoring well network are in Sections 17, 19, and 21 of Township 29 S, Range 22 E, Mt. Diablo Baseline and Meridian, in the southwestern San Joaquin Valley. The Facility is not within an oil field; it is just outside the boundaries of South Belridge, Monument Junction, and Cymric Oil Fields, approximately 4.5 miles north of the community of McKittrick, and approximately 8.7 miles west of the community of Buttonwillow.
- Valley Water's February 2019 self-monitoring report (SMR) indicates produced wastewater enters the Facility though a single pipeline from producer Sentinel Peak Resources (SPR). Valley Water confirmed that California Resource Corporation (CRC) ceased discharging to the Facility approximately two years ago. About 42,000 barrels of wastewater per day (bpd) or 1.8 million gallons per day (gpd) were discharged to the 83 unlined ponds at the Facility in 2018. Reported discharge rates since 2015 through 2018 have varied from 105,000 barrels per day (bpd) (4.4 million gpd) to 38,000 bpd (1.6 million gpd) and an average of a little over 59,000 bpd (2.5 million gpd). Aerial photographs of the McKittrick 1 & 1-3 Facility are attached hereto as Attachments A and B. Attachment B is a close-up showing the Administrative Boundaries of nearby oil fields.
- As described more in the Findings below and the Staff Report, which is attached hereto
  and a part of this Order, the Facility discharge contains high levels of salts, boron, and
  some organic compounds and has created a groundwater mound and plume that is
  migrating to the northeast.

#### **Facility Regulation**

Facility discharges are regulated under Waste Discharge Requirements (WDRs)

Resolution No. 69-199, adopted by the Central Valley Water Board on 14 February 1969, which prescribes requirements for the discharge to the unlined ponds of non-hazardous produced wastewater from Belgian Anticline, Cymric, and McKittrick Oil Fields. WDRs Resolution No. 69-199 states:

"1. The Discharge shall not cause a pollution of ground or surface waters.

The Explanation of Requirements (analog to today's Information Sheet or Fact Sheet) states:

"Pollution means an impairment of the quality of waters of the state by sewage or other waste to a degree which does adversely and unreasonably affect such waters for domestic, industrial, agricultural, navigational, recreational, or other beneficial use."

- 5. Resolution No. 69-199 predates the *Water Quality Control Plan for the Tulare Lake Basin, Third Edition, May 2018* (hereafter Basin Plan) and does not contain the Basin Plan maximum effluent limits for oilfield discharges to unlined ponds of 1000 umhos/cm for electrical conductivity, 200 mg/L for chloride, and 1 mg/L for boron. The Basin Plan allows the Board to authorize discharges of oil field produced water exceed the maximum effluent limits if the discharger successfully demonstrates in a public hearing that the proposed discharge will not substantially affect water quality nor cause a violation of water quality objectives. Exceptions from the EC and/or the chloride limit may also be permitted consistent with the Basin Plan *Program for Exception from Implementation of Water Quality Objectives for Salinity*.
- The Facility is in Kern County Basin Hydrologic Unit, Detailed Analysis Unit (DAU) 159.
   The designated the beneficial uses of the groundwater, as specified in the Basin Plan are municipal and domestic supply (MUN), agricultural supply (AGR), and industrial service supply (IND).
- 7. The Facility is in the South Valley Floor Hydrologic Unit, within the Antelope Plain Hydrologic Area (558.60), in the Tulare Lake Basin. The Basin Plan surface water beneficial uses for Valley Floor waters are: AGR, IND, industrial process supply, water contact recreation, non-contact recreational, warm freshwater habitat, wildlife habitat, rare, threatened, or endangered species habitat, and groundwater recharge.
- 8. On 4 April 2018, the Board's Executive Officer issued Monitoring and Reporting Program R5-2018-0808 (MRP) to Valley Water for the Facility. The MRP required Valley Water to submit by 4 June 2018 a Monitoring Well Installation and Sampling Plan (MWISP) for additional groundwater monitoring wells to fully delineate the extent of the produced wastewater mound and groundwater plume discharges to the Facility's ponds.
- On 5 April 2018, the Board adopted Resolution R5-2018-0015. Resolution R5-2018-0015 (Resolution) directed staff to take appropriate action to determine whether Valley Water's discharge should be regulated under Order R5-2017-0035 Waste Discharge Requirements General Order for Oil Field Discharges to Land General

Order Number Two, or Order R5-2017-0036 Waste Discharge Requirements General Order for Oil Field Discharges to Land General Order Number Three, or whether Valley Water should be directed to submit for a report of waste discharge for individual waste discharge requirements.

- 10. During the hearing, the Board contemplated that it would take approximately one year to obtain additional groundwater monitoring and other data required by MRP R5-2018 -0808 necessary to determine an appropriate course of action to regulate the Facility. It was also expected that the two 2018 SMRs would include data from additional monitoring wells and select monitoring wells upgradient from the Clean Harbors Buttonwillow, Inc., facility (Clean Harbors), which is approximately 1.7 miles down structure and down gradient of the Valley Water Facility.
- 11. Valley Water submitted the MWISP to the Central Valley Water Board on 4 June 2018, and Board staff provided on 27 July 2018 conditional approval for Valley Water to implement the MWISP. Instead of implementing the conditionally approve MWISP, Valley Water submitted a modified MWISP to the Central Valley Water Board on 27 August 2018. In response, the Executive Officer issued on 13 September 2018 to Valley Water another conditional approval including a time schedule pursuant to Water Code section 13267 (13267 Order). The intent of the 13267 Order was to establish a definitive time schedule for Valley Water to complete groundwater monitoring wells to further assess the downgradient extent of its produced wastewater plume.
- 12. On 3 October 2018, the Discharger submitted an updated Biological Assessment (Assessment) of the proposed monitoring well locations. The Assessment states that a new biological assessment survey (Survey) is recommended and may be necessary for all proposed monitoring well locations, and the Survey would take approximately one year. The Assessment states the time required to conduct the Survey will proscribe the Discharger from complying with items in the 13 September 2018 13267 Order.
- 13. The two 2018 Semi-Annual SMRs for the Facility do not include groundwater monitoring data from additional wells or from the Clean Harbors' monitoring wells. The additional monitoring wells had not been installed by the Discharger to further investigate the lateral and vertical extent of the saline plume generated by discharges to the Facility's ponds. As discussed in more detail below and in the Staff Report, the regional aquifer continues to increase in concentrations of constituents of concern associated with produced wastewater discharges to the ponds.

#### LAND USE AND HYDROGEOLOGY

- 14. Land use near the site is a mixture of undeveloped land, oil production and industrial areas, and agricultural uses. The closest agricultural land is adjacent to Lokern Road, approximately 1,600 feet north of the Facility. The Clean Harbors' facility is approximately 1.7 miles northeast of the Valley Water Facility.
- 15. There is agricultural land 1,600 feet north of the Facility and several miles to the east of the Facility. Agricultural wells in the vicinity that are downgradient of the Facility have

total dissolved solids (TDS) concentrations ranging from 2,300 mg/L to 6,800 mg/L. See the Staff Report for a more detailed discussion and map showing the locations and water quality of specific wells. Starrh Family Farms LP owns and operates these wells, and they are reportedly important for operations when surface water deliveries are in short supply. The use of these wells indicates that the AGR beneficial use designated in the Board's Basin Plan is also an existing use downgradient of the Valley Water Facility.

- 16. The hydrogeology of the Facility site is complex and described in more detail in the Staff Report for this Order. The next five findings summarize the stratigraphy and the effects of the depositional environment on the stratigraphy.
- 17. The Facility sits on Holocene age alluvium and is just east of the Cymric and Monument Junction oil fields and south of the South Belridge oil field, as shown on Attachment B. The topography slopes about 30 feet per mile from the west-southwest to the east-northeast. The alluvium and underlying stratigraphic intervals to be described in the following findings structurally dip from the southwest to the northeast. The alluvium comprises alluvial fan sediments that consist of interbedded layers of poorly sorted, relatively coarse grained, subangular to angular sands with silts and clays. Subangular to angular gravely sands also occasionally occur within the fan sediments. Due to their depositional environment, the sands are heterogenous and anisotropic, likely channelized, and considered to be highly permeable.
- 18. Beneath the alluvium is a silty clay to clay bed called the Corcoran Clay Equivalent (CCE) that separates the alluvium from the Pleistocene age Tulare Formation. As described in Valley Water's hydrogeologic reports, the CCE in the vicinity of the Facility does not act as a significant barrier to the downward migration of produced wastewater. Valley Water's SMRs depict a wastewater plume directly beneath the ponds that has migrated below the CCE and into underlying Tulare Formation sediments.
- 19. Beneath the CCE is the upper Tulare or upper Tulare sand. The upper Tulare interval is comprised of deposits that vary greatly from fine grained lacustrine (lake) deposits to coarser-grained channel deposits. The deposits are comprised of fine-grained sands with interbedded silt and clay layers and gravels.
- 20. Beneath the upper Tulare interval is the dense and stiff upper Tulare clay bed, which separates the upper Tulare from the deeper Tulare interval. The deeper Tulare interval is composed primarily of fine-grained to medium-grained sands. Groundwater within this zone is part of the regional aquifer that supplies water supply wells to the east.
- 21. The upper Tulare clay and, where present, the CCE, may not be laterally continuous layers as they appear in the Valley Water cross sections. The upper Tulare clay and CCE may be erosionally cut by overlying fluvial channels that contain permeable coarse sands and gravels deposited during high energy storm events. These repeated depositional events, typical for alluvial fan systems underlain by lacustrine (lake deposits) sediments, would compromise the integrity of the upper Tulare clay bed and prevent it from being an effective aquitard.

#### WASTE DISPOSAL OPERATIONS AND GROUNDWATER CONDITIONS

22. Table 1 presents self-monitoring data submitted by the Discharger from November 2002 through November 2018 characterizing the discharge and compares it to Basin Plan effluent limits for oil field discharges and State drinking water Maximum Contaminant Levels.

Table 1 Produced Wastewater Discharge Quality

Parameters (units)	Wastewater Discharge Range	Basin Plan Limits	MCLs <sup>1</sup>		
Electrical Conductivity (EC) @ 25°C² (µmhos/cm³)	11,000 - 41,000	1000	900/1600/2200		
Total Dissolved Solids (TDS) (mg/L4)	11,000 - 26,000		500/1000/1500		
Chloride (mg/L)	3,600 - 11,000	200	250/500/600		
Boron (mg/L)	53 – 94	1			
Benzene (µg/L <sup>5</sup> )	$0.46 - 400^{6,7}$		1		
Toluene (μg/L)	$0.31 - 1000^{6,7}$		150		
Ethylbenzene (µg/L)	0.75 - 120 <sup>6,7</sup>		300		
Total-Xylenes (μg/L)	1.2 - 550 <sup>6,7</sup>		1750		

<sup>1.</sup> MCLs = state drinking water maximum contaminant level. The MCLs for benzene, toluene, ethylbenzene, and total xylenes (BTEX) are Primary MCLs and have one numerical limit. The MCLs for electrical conductivity, chloride, and total dissolved solids are Secondary MCLs or "Consumer Acceptance Contaminant Level Ranges" and three different values are shown as the limits. The first number is the "Recommended" MCL, while the second number is the "Upper" MCL, and the third number is the "Short term" MCL

- 23. As shown in Finding 22, the EC, chloride, and boron concentrations in the discharge significantly exceed the numerical limits set for oil field discharges to land contained in the Basin Plan. The Basin Plan also contains a narrative water quality for chemical constituents which requires, in part, that groundwater not contain chemical constituents in concentrations that adversely affect any beneficial use. For groundwater that is designated for use as domestic and municipal supply, such as DAU 159, the Basin Plan incorporates by reference drinking water maximum contaminant levels (MCLs) promulgated in Chapter 15 of Title 22 of the California Code of Regulations. The discharges from the Facility exceed the MCLs, which the Basin Plan establishes as levels protective of the groundwater's MUN beneficial use.
- 24. Agricultural water quality objectives for salinity and boron vary due to crop tolerances. Water Quality for Agriculture, FAO Irrigation and Drainage Paper 29 Rev. 1 (1994) indicates that irrigation water use is severely restricted when the EC is greater than 3000 umhos/cm, the TDS is greater than 2000 mg/L, the chloride is greater than 350

<sup>&</sup>lt;sup>2.</sup> °C = degrees Celsius.

<sup>3.</sup> µmhos/cm = micromhos per centimeter.

<sup>4.</sup> mg/L = milligrams per liter.

<sup>5.</sup> µg/L = micrograms per liter.

<sup>&</sup>lt;sup>6.</sup> Includes data from samples collected by Board staff during field inspections.

<sup>7.</sup> BETX are not detected in groundwater or, if they are detected, are below MCLs. See Finding 28.

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mg/L (surface irrigation), or the boron is greater than 3 mg/L. As shown in Finding 22, the EC, TDS, chloride and boron concentrations of the discharge exceed these agricultural water quality criteria by orders of magnitude.

- 25. To characterize groundwater impacts from the Facility's ponds, Valley Water installed three groundwater monitoring wells in 2002. The monitoring well locations are shown on Attachment C. CYM-17N1, CYM-19H1 are considered shallow wells and are screened in the upper Tulare. CYM-21D1 is considered a deeper well and is screened in the deeper Tulare. In 2006, Valley Water installed three more shallow wells farther downgradient of the Facility (CYM-17K1, CYM-17M1, and CYM-17Q1). CYM-17K1, CYM-17M1, and CYM-17Q1 did not encounter groundwater during drilling and were installed as dry sentinel wells. Valley Water's consultant interpreted the results as delineating the horizontal extent of Valley Water's plume.
- 26. In February 2015, Valley Water submitted a self-monitoring report indicating that CYM-17M1 had 26.56 feet of water, CYM-17K1 had 48.99 feet of water, and CYM-17Q1 had 6.93 feet of water at the time of sampling. The self-monitoring report acknowledged that produced wastewater had migrated past the sentinel wells.
- 27. Attachment C depicts the locations of the Valley Water's ponds and groundwater monitoring wells. CYM-19H1 is approximately 1,500 feet northwest and down structure and down gradient of the ponds. CYM-17N1 is about 3,600 feet northwest and down structure and down gradient of the ponds. CYM-17K1 is about 5,800 feet northwest and down structure and down gradient of the ponds. The Attachment indicates that the predominate direction of groundwater flow is to the northeast. The Attachment also shows the mound is large. In November 2018, the mound gradient is about 153 feet (500 ft AMSL 346.78 ft AMSL) from the ponds to CYM-19H1, another 25 feet (346.78 ft AMSL 321.60 ft AMSL) from CYM-19H1 to CYM-17N1, and about another 49 ft (321.60 ft AMSL 272.48 ft AMSL) from CYM-17N1 to CYM-17K1. Finally, the Attachment shows the mound remains undefined to the north, northeast, northwest, west, south, and southeast.
- 28. Constituent ranges for Valley Water groundwater monitoring data from 2002 through 2018 are summarized in Table 3 along with the Basin Plan effluent limits for oil field discharges to land and the State drinking water MCLs.

Table 3 Groundwater Quality Data

Well ID	EC (µmhos/cm) Range	TDS (mg/L) Range	Chloride (mg/L) Range	Boron (mg/L) Range	BTEX (µg/L)			
					Benzene	Toluene	Ethylbenzene	Xylenes
CYM-19HI	8500-23000	10500-14000	4120-5700	30-41	0.65- 0.79	ND <sup>1</sup>	ND	ND
CYM-17N1	10900-33000	7450-18000	2700-8000	20-76	0.53	ND	ND	ND
CYM-17K1	18000-28000	16000-18000	6000-8000	55-68	ND	ND	ND	ND
CYM-17M1	15840-24350	12000-16000	4900-7000	40-55	0.27	ND	ND	ND
CYM-17Q1	13000-22600	13000-16000	4800-5900	45-60	ND	ND	ND	ND
CYM-21D1	1970-11000	1200-10000	334-2900	2.5-22	0.62	ND	ND	ND
Basin Plan limits <sup>2</sup>	1000	18	200	1	-	-	-	-
MCLs <sup>3</sup>	900/1600/2200	500/1000/1500	250/500/600	, <del>=</del> 2	1	150	300	1750

ND = not detected above laboratory reporting limit. Prior to 2018, reporting limits for benzene, toluene, ethylbenzene, and total xylenes (BTEX) was 2.0 ug/L. Subsequently, reporting limit has been 0.5 ug/L.

2. Basin Plan = Water Quality Control Plan for the Tulare Lake Basin, Third Edition which sets limits for oil field discharges to land.

- 29. Valley Water's SMRs indicate produced wastewater discharged to the Facility ponds has elevated sodium, chloride, and TDS concentrations and low sulfate, calcium, and magnesium concentrations. According to Valley Water's consultant, groundwater samples collected in November 2018 from monitoring wells CYM-19H1, CYM-17N1, and sentinel wells CYM-17K1, CYM-17M1, and CYM-17Q1 plot close to the Facility discharges with respect to sodium and chloride ions, indicating that they are impacted by discharges from the ponds. The presence of significant volumes of groundwater in CYM-17K1, CYM-17M1, and CYM-17Q1 also indicates the produced wastewater plume has migrated beyond the Facility's monitoring well network which extends to more than 1.1 miles northeast of the Facility's ponds.
- 30. Groundwater concentrations in TDS, chloride, boron are increasing in two of Clean Harbors' background groundwater monitoring wells. MW-148I is screened in the upper Tulare, and MW-102RL is screened in the deeper Tulare. These wells are part of the background monitoring network for the Clean Harbors Facility, and as such the increasing groundwater concentrations reflect an upgradient source. The TDS in MW-148I has increased from 2,340 mg/L in 2011 to 6,600 mg/L in 2018. The chloride in MW-148I has increased from 246 mg/L in 2009 to 1,800 mg/L in 2018. The boron in MW-148I has increased from 4.9 mg/L in 2015 to 9.5 mg/L in 2018. The TDS in MW-102RL has increased from 3,040 to 4,000 umhos/cm (high of 4,300 in 1Q2018 to 3,800 in 4Q2018). The chloride in MW-102RL has increased from 450 mg/L in 2007 to about

<sup>3.</sup> MCLs = maximum contaminant level. The MCL's for benzene, toluene, ethylbenzene, and total xylenes (BTEX) are Primary MCLs and have one numerical limit. The MCLs for electrical conductivity, chloride, and total dissolved solids are Secondary MCLs or "Consumer Acceptance Contaminant Level Ranges" and three different values are shown as the limits. The first number is the "Recommended" MCL, while the second number is the "Upper" MCL, and the third number is the "Short term" MCL.

750 to 780mg/L in 2018. The increases in constituent concentrations in MW-102RL indicate the that the produced wastewater from the Valley Water ponds is adversely affecting the regional aquifer. There is some variability in the trends. Graphs of the described trends for MW-148I and MW-102RL are included in the Staff Report.

- 31. Valley Water data for deeper monitoring well CYM-21D1 continues to show increasing EC, TDS, chloride, and boron concentrations, indicating that produced wastewater discharged to the ponds is migrating through the upper Tulare clay layer and also adversely affecting the regional aquifer. From 2002 to 2018, monitoring well CYM-21D1 has increased in TDS from 1,200 mg/L to about 8,000 mg/L, chloride from 334 mg/L to about 2,700 mg/L, and boron from 2.5 mg/L to 22 mg/L. Graphs of CYM-21D1 constituent concentration trends are included in the Staff Report.
- 32. The information summarized in Findings 14 through 31 demonstrate that produced wastewater discharged to the Facility's disposal ponds has generated a plume that has traveled beyond Valley Water's monitoring wells appear to be affecting groundwater in wells at Clean Harbors facility to northeast of the disposal ponds in two groundwater zones (upper Tulare and deeper Tulare which are part of the regional aquifer supplying beneficial use water for agriculture down gradient). The produced wastewater discharged to the Facility ponds and the resulting plume exceeds water quality objectives associated with MUN for EC, TDS, and chloride, and AGR for TDS, EC, chloride, and boron. Based on the EC, TDS, chloride and boron concentrations in monitoring CYM-21D1, MW-148I, and MW-102RL; in the early 2000's, water in the wells was potentially suitable for AGR. More recent increases in these constituents render the groundwater in these wells unsuitable for irrigation of most, if not all crops

#### **COMPLIANCE ISSUES**

- 33. As described in Finding 4, WDRs Resolution No. 69-199 prohibits the discharge from causing pollution of ground or surface waters. The Discharger has generated an oil field produced wastewater plume that is migrating to the northeast. The groundwater in the plume greatly exceeds the quality with respect to EC, TDS, chloride and boron required to support the Basin Plan designated beneficial uses of MUN and AGR. The plume has migrated at least 2.2 miles northeast of the Facility's disposal ponds in the upper Tulare and in the deeper regional aquifer. The plume has caused a condition of pollution in CYM-21D1, as water in it is no longer likely suitable for AGR. The water in monitoring wells MW-102RL is approaching concentrations of salinity and boron that will render it unsuitable for irrigation of most crops while water in MW-148I already has become unsuitable. The plume has adversely impacted and/or threatens to adversely impact the beneficial uses of groundwater currently being used for AGR in violation of the Resolution 69-199 and the Basin Plan.
- 34. On 13 September 2018, the Central Valley Water Board issued a 13267 Order to Valley Water Management Company. The Order required the completion and sampling of all MWISP proposed and conditionally approved monitoring wells and the submittal of a technical report, by 1 March 2019. On 3 October 2018, the Central Valley Water Board received correspondence from the Discharger that stated that no additional monitoring

wells could be installed prior to the completion of a new Biological Assessment which would take approximately a period of one year, and thus, the Discharger will not be able to comply with the 13267-time schedule Monitoring Well Installation Completion Report required by the 1 March 2019 due date.

#### **REGULATORY CONSIDERATIONS**

35. Section 13301 of the California Water Code states in part:

When a Regional Board finds that a discharge of waste is taking place or threatening to take place in violation of requirements or discharge prohibitions prescribed by the regional board or the state board, the board may issue an order to cease and desist and direct that those persons not complying with the requirements or discharge prohibitions (a) comply forthwith, (b) comply in accordance with a time schedule set by the board, or (c) in the event of a threatened violation, take appropriate remedial or preventive action. Cease and desist orders may be issued directly by a board, after notice and hearing, or in accordance with the procedure set forth in Section 13302.

- 36. Section 13267(b) of the California Water Code states, in relevant part:
  - (a) A regional board, in establishing or reviewing any water quality control plan or waste discharge requirements, or in connection with any action relating to any plan or requirements or authorized by this division, may investigate the quality of any waters of the state within this region.
  - (b)(1) In conducting an investigation specified in subdivision (a), the regional board may require that any person who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge waste within its region, or any citizen or domiciliary, or political agency or entity of this state who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge, waste outside of its region that could affect the quality of waters within its region shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires. The burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports. In requiring those reports, the regional board shall provide the person with a written explanation with regard to the need for the reports and shall identify the evidence that supports requiring that person to provide the reports.
- 37. Valley Water owns and operates the Facility that discharges the waste subject to this Order. These discharges have degraded/polluted and/or threaten to degrade/pollute groundwater down gradient of the Facility. The reports and actions required by this Order are necessary to define the lateral and vertical extent of the plume migrating from the Facility, to ensure the Discharger complies with the requirements of this Order; and to ensure that Valley Water brings the Facility into compliance with WDRs Resolution No. 69-199, MRP Order R5-2018-808, the Basin Plan, and the Water Code

to assure protection of waters of the state.

- 38. This Order will require the Valley Water Management Company to cease discharging in violation of existing permit requirements and to develop either a proposal for a new permit or plans for the orderly wind-down of operations at the Facility. While the Board may need to evaluate potentially significant environmental impacts associated with a new permit or the implementation of a closure workplan (CEQA, Pub. Resources Code, § 21000 et seq.), the Board is not required to engage in speculation about what those impacts would be before remedial action plans and/or a report of waste discharge is submitted to the Board and thus environmental review of those options is not required at this time. Further, this action may also be considered exempt from the provisions of CEQA because it is an enforcement action to address a violation of a permit requirement (Cal. Code Regs., tit. 14, § 15321.), an action by a regulatory agency for the protection of natural resources (Cal. Code Regs., tit. 14, § 15307.), and an action by a regulatory agency for the protection of the environment (Cal. Code Regs., tit. 14, § 15308.). Should additional environmental review be required in connection with future discretionary regulatory actions, the Board may recover the costs associated with preparing and processing environmental documents. (Pub. Resources Code, § 21089.)
- 39. If the Central Valley Water Board determines that implementation of any plan required by this Cease and Desist Order will have a significant effect on the environment, the Board will conduct the necessary and appropriate environmental review prior to the Executive Officer's approval of the applicable plan. The Discharger will bear the costs, including the Board's costs, of determining whether implementation of any plan required by this Cease and Desist Order will have a significant effect on the environment and, if so, in preparing, handling and providing any documents necessary for environmental review. If necessary, the Discharger and a consultant acceptable to the Board shall enter into a memorandum of understanding with the Board regarding such costs prior to undertaking any environmental review.
- 40. As a result of the events and activities described in this Order, the Central Valley Water Board finds that a discharge of waste in violation of the Basin Plan has polluted groundwater. This Order requires Valley Water to take appropriate remedial action and to comply in accordance with the time schedule set forth below.
- 41. On 6/7 June 2019, in Rancho Cordova, California, after due notice to the Discharger and all other interested persons, the Central Valley Regional Board conducted a public hearing at which evidence was received to consider an Order under Water Code section 13301 to establish a time schedule to achieve compliance with the Basin Plan or cease discharge.

IT IS HEREBY ORDERED THAT, pursuant to Sections 13301 and 13267 of the California Water Code, Valley Water Management Company, its agents, successors, and assigns, shall implement the following at the McKittrick 1 & 1-3 Facility:

KERN COUNTY

- 1. Cease and desist from discharging produced wastewater in violation and threatened violation of WDR Resolution No. 69-199 and the *Water Quality Control Plan for the Tulare Lake Basin* in accordance with the following tasks and dates.
- 2. By **1 October 2019**, Valley Water Management Company shall implement the already approved Work Plans for the McKittrick 1 and 1-3 Facility. Work to be completed shall include:
  - a. Completion and submittal of a technical report of the results of the hydrogeological investigation to fully characterize the nature and lateral and vertical extent of the release of waste constituents from the Facility ponds consistent with the evaluation monitoring program requirements contained in California Code of Regulations, Title 27, section 20005 et seq. (Title 27).
  - b. Preparation and submittal a Water Quality Protection Standard Report identifying each potential Constituent of Concern in the discharges to the Facility ponds and proposing statistical data analysis methods to calculate concentration limits for each Constituent of Concern.
  - c. Identify and sample water supply wells located within 2.5 miles of the Facility and analyze the samples for Constituents of Concern;
- 3. By 1 January 2020, Valley Water Management Company shall:
  - a. Submit a complete Report of Waste Discharge based on the information acquired during the Work Plan for the McKittrick 1 and 1-3 Facility that will ensure that future discharges at the McKittrick 1 and 1-3 Facility will be in compliance with the Water Quality Control Plan for the Tulare Lake Basin. The Report of Waste Discharge may propose a reasonable time schedule to come into compliance with applicable requirements of the Water Quality Control Plan for the Tulare Lake Basin.
  - b. Submit a Closure Plan and Closure Time Schedule for the wind-down and closure of any portions of the McKittrick 1 and 1-3 Facility that Valley Water Management Company determines are no longer to be used. The Closure Plan and Time Schedule shall specify the dates by which Valley Water Management Company will remove the residual liquid waste and close the ponds in accordance with applicable regulatory requirements.
  - c. Submit a *McKittrick 1 and 1-3 Facility Remediation Workplan* based on the hydrogeological investigation that describe a time schedule under which Valley Water Management Company will conduct groundwater, surface water, and/or soil remediation consistent with the corrective action program requirements of Title 27. This will entail the preparation of an engineering feasibility study followed by a proposed corrective action program.
- 4. **On 1 July 2020**, Valley Water is prohibited from discharging to the McKittrick 1 and 1-3 Facility unless those discharges are in compliance with waste discharge requirements issued by the Central Valley Water Board.

All technical reports required herein that involve planning, investigation, evaluation, or design, or other work requiring interpretation and proper application of engineering or geologic

sciences, shall be prepared by or under the supervision of persons registered to practice in California pursuant to California Business and Professions Code, Sections 6735, 7835, and 7835.1. As required by these laws, completed technical reports must bear the signatures(s) and seal(s) of the registered professional(s) in a manner such that all work can be clearly attributed to the professional responsible for the work.

**Signatory Requirements.** All documents required under this Cease and Desist Order shall be signed and certified by Valley Water or by a duly authorized representative and submitted to the Central Valley Water Board. A person is a duly authorized representative only if: 1) The authorization is made in writing by Valley Water; and 2) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity. (A duly authorized representative may be either a named individual or any individual occupying a named position.)

With each document required by this Cease and Desist Order, Valley Water shall provide under penalty of perjury under the laws of California a "Certification" statement to the Central Valley Water Board. The "Certification" shall include the following signed statement:

"I certify under penalty of perjury of law that I have personally examined and am familiar with the information submitted in this documents and all attachments and that, based on my knowledge and on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

All documents submitted in compliance of this Order shall be submitted over the internet to the State Water Board Geographic Environmental Information Management System database (GeoTracker) at http://www.waterboards.ca.gov/ust/electronic\_submittal/index.shtml.

A frequently asked question document for GeoTracker can be found at: http://www.waterboards.ca.gov/ust/electronic\_submittal/docs/faq.pdf.

Electronic submittals to GeoTracker shall comply with GeoTracker standards and procedures, as specified on the State Water Board's web site.

In addition to pdf documents, all analytical laboratory data shall be uploaded by the Discharger or on behalf of the discharger as an Electronic Deliverable Format (EDF) submittal into GeoTracker for Global ID: **L10007494132** 

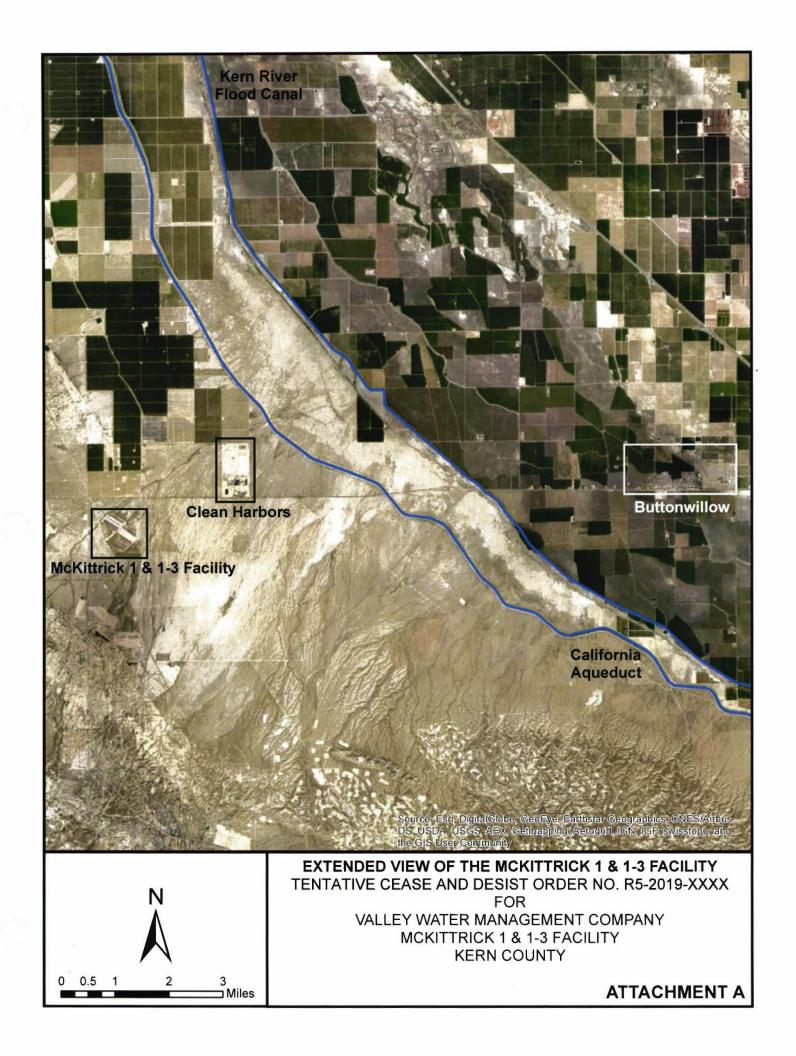
If in the opinion of the Executive Officer, the Discharger violates this Order, the Executive Officer may refer this matter to the Attorney General for judicial enforcement or may issue a complaint for Administrative Civil Liability.

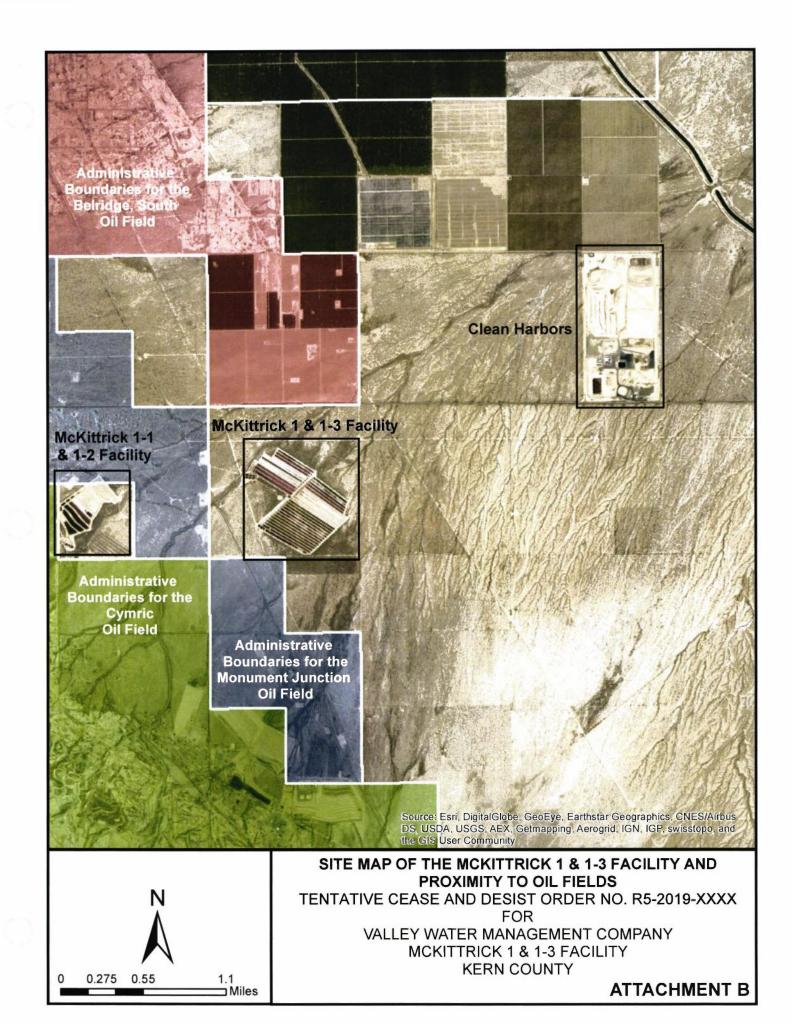
Failure to comply with this Order, Resolution 69-199 or MRP R5-2018-0808, may result in the assessment of Administrative Civil Liability of up to \$10,000 per violation, per day, depending on the violation, pursuant to the Water Code, including sections 13268, 13350 and 13385. The Central Valley Water Board reserves its right to take any enforcement actions authorized by law.

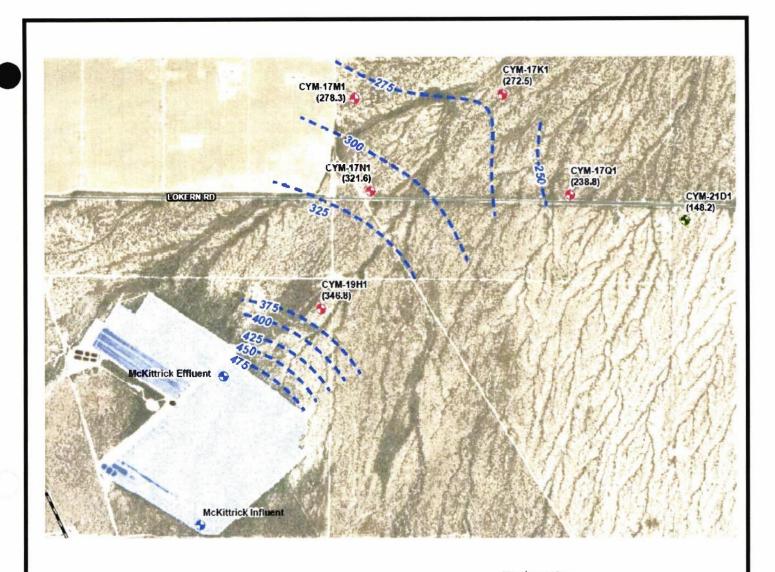
Any person aggrieved by this action of the Central Valley Water Board may petition the State Water Board to review the action in accordance with Water Code section 13320 and California Code of Regulations, title 23, sections 2050 and following. The State Water Board must receive the petition by 5:00 p.m., 30 days after the date of this Order, except that if the thirtieth day following the date of this Order falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Board by 5:00 p.m. on the next business day. Copies of the law and regulations applicable to filing petitions may be found on the Internet at: <a href="http://www.waterboards.ca.gov/public\_notices/petitions/water\_quality\_">http://www.waterboards.ca.gov/public\_notices/petitions/water\_quality\_</a> or will be provided upon request.

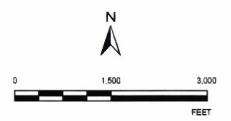
I, PATRICK PULUPA, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Central Valley Region on 6/7 June 2019.

PATRICK PULUPA, Executive Officer









#### **Explanation**

- GROUNDWATER ELEVATION, ft amsi
- POND SAMPLE POINT
- MONITORING WELL SCREENED IN THE UPPER TULARE SAND (GROUNDWATER ELEVATION, ft amsi) MONITORING WELL SCREENED IN THE
- LOWER TULARE SAND (GROUNDWATER ELEVATION, ft amsi)

Source of Map: Valley Water Management Company (Second Semi-Annual 2018) By Golder Associates Inc UPPER TULARE
POTENTIOMETRIC SURFACE MAP
TENTATIVE CEASE AND DESIST ORDER

FOR
VALLEY WATER MANAGEMENT COMPANY
MCKITTRICK 1 & 1-3 FACILITY
KERN COUNTY

ATTACHMENT C